CYP2C19*2. This contributes to the decrease in the active metabolite of clopidogrel in the blood and reduce the effectiveness of clopidogrel therapy.
Aim of the study. The importance of CYP2C19 genotyping and knowing the patient's phenotype.
Materials and methods. Exploring the bibliographic sources in the years 2010-2017 in the databases: PubMed, Google Scholar, Cochrane
Results. Numerous meta-analyzes have shown that the presence of CYP2C19*2 polymorphism in patients administering clopidogrel, increases the risk of cardiovascular (CV) complications such as: myocardial infarction (MI), ischemic stroke and stent thrombosis. In March 2010, Food and Drug Administration (FDA) recommended genetic testing to determine non-functioning CYP2C19 alleles. This test is useful to identify a patient's CYP2C19 genotype and determines the therapeutic course of action. Individualized antiplatelet treatment allows us to anticipate potential efficacy, maximize benefits by reducing the risk of recurrent CV events. Studies have shown that genotype-guided therapy has economic benefits due to the prevention of adverse cardiac events. American College of Cardiology/American Heart Association (2012) recommended genetic tests for clopidogrel resistance in patients with recurrent CV events despite antiplatelet treatment. The Clinical Pharmacogenetics Implementation Consortium (CPIC) (2013) recommend to use genotype-guided antiplatelet therapy for patients with ACS who are undergoing PCI and use alternative antiplatelet agent (ticagrelor, prasugrel) for intermediate metabolizer (*1/*2; *1/*3; *2/*17) and poor metabilizer (*2/*2; *2/*3; *3/*3), if no contraindication.
Conclusions. CYP2C19 genotyping is useful to identify intermediate and poor metabolizer, prescribing an antiplatelet therapy based on CYP2C19 genotype that would reduce thrombotic complications. The criteria for personalized therapy have so far not been established that would guarantee the efficacy and individual safety of patients that administer clopidogrel.
Key words: CYP2C19 genotype, clopidogrel.

DEPARTMENT OF OTORHINOLARYNGOLOGY

124. PROSPECTS OF CELL THERAPY IN THE TREATMENT OF RECURRENT AND CHRONIC RHINOSINUSITIS IN CHILDREN

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Introduction. Chronic rhinosinusitis is an important public health issue, the incidence and prevalence of which has been constantly growing in both the developing and the developed countries, having a negative impact on the quality of life and bringing about significant costs for the diagnosis and treatment. The management of recurrent ting and chronic rhinosinusitis represents a major concern for the otorhinolaryngology service. Traditionally, the treatment of recurrent and chronic rhinosinusitis has been performed by administering antibiotics, nasal irrigation with saline solution, decongestant nasal sprays, topical and systemic corticosteroids, antihistamines, antileukotrienes, and surgery as needed. Unfortunately, these methods are not free of risks and adverse effects. At the same time, the efficiency of standard treatment is lower than expected.
Aim of the study. To review the specialized literature and conduct a clinical and immunologic research whose aim is treatment of recurrent and chronic rhinosinusitis in children optimization using cell therapy.
Materials and methods. This article summarizes the information from specialized literature about the importance of cell therapy in the treatment of a number of pathologies, particularly its

importance in the treatment of rhinosinusal inflammatory pathology. The bibliographic used databases were the following: Cohrane, PubMed, and Medline.
Results. A placebo-controlled randomized trial of bone marrow-derrivated mesenchymal cells (MSC) [Prochymal; Osiris Therapeutics Inc] in patients with moderate to severe chronic obstructive broncho-pneumopathy (COBP) in the United States has proved safe and with no acute infusion-related toxicity and no attributed mortality or serious adverse reactions during a two-year monitoring period. Another randomised controlled study on 24 patients has shown that the administration of marrow-derived mononuclear stem cells is feasible and safe in ischemic stroke. Cell therapy combined with physiotherapy has led to improvement of the clinical scores and the functional imaging (fMRI) after 8 weeks, as compared to only physiotherapy, and changes have lasted up to 24 weeks. Stem cells perform a ”Trojan Horse” type of action in the affected nervous tissue, by stimulating the repair mechanisms, which leads to behavioural recovery after a stroke. A laboratory research has shown that adipose tissue-derived stem cells (ADSCs) may provide a clinical option for the repair of vocal folds mucous injuries. Danilov L. (2016) proposed a new method for local immunocorrection (with autologous mononuclear cells) in the conservative complex treatment of compensated chronic tonsillitis in children, which proved to be very efficient through its positive clinical effect, the normalisation of body’s pre-immune resistance; the obvious drop-down of the high index of allergic reactions, and of the levels of specific cell sensitivity to the antigens of streptococcus, pneumococcus; the increase of the total content of lymphocytes, as well as the level and functional activity of T and B lymphocytes; increase in the efficiency of the cytokine profile and reduction of pro-inflammatory cytokines (TNF-α, IL-8, IL-1β), as well as and the increase of the serum concentrations of anti-inflammatory cytokines (IL-4).
Conclusion. The researches presented in this review strongly support the further investigation of the cell therapy methods for the treatment of chronic otorhinolaryngology pathologies.
Key words: recurrent and chronic rhinosinusitis, cell therapy, immunologic marker

125. NASAL PERMEABILITY IN CHILDREN WITH CHRONIC HYPERTROPHIC RHINITIS

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Introduction. Chronic hypertrophic rhinitis represents a current and a major problem in otorhinolaryngology, with a frequency of 16-25% of the population in different countries, with a growing prevalence and accounting for about half of the pathology of patients, which is addressed to the Otorhinolaryngologist.Among the methods of diagnosis of chronic hypertrophic rhinitis one of the most representative is acoustic rhinometry. Acoustic rhinometry is a very effective and easy method to determine the degree of nasal obstruction. This method was described by Jackson in 1977 and was first applied by Hilberg (1986) and provides for the writing of nasal fossil geometry. Acoustic rhinometry allows non-invasive evaluation of nasal permeability to be applied to children. Therefore we considered it appropriate to conduct a literature review on the methods of diagnosis of chronic hypertrophic rhinitis.
Aim of the study. To perform a detailed analysis of the contemporary literature data for the diagnosis of acoustic rhinometry in chronic hypertrophic rhinitis.
Materials and methods. We have carried out a successive analysis of the bibliographic data of recent years presented in the specialized periodical literature on the Internet and Medline. We have selected scientific papers published in our country and abroad, which refer best to the issues that we approached in this study. As a method of study we used the analysis of the theoretical